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FPE 9

Expansion device shall be fabricated in one section, except for stage construction and when the length is over 50 feet. A complete joint penetration groove weld splice shall be required. Welds shall be ground flush to provide a smooth surface. The expansion device shall be fabricated and installed to the crown and grade of the roadway.

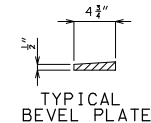
Material for the expansion device shall be ASTM A709 Grade 36 structural steel. Anchors for the expansion device shall be in accordance with Sec 1037.

Payment for furnishing, coating or galvanizing and installing the structural steel for the expansion device will be considered completely covered by the contract unit price for Expansion Device (Flat Plate) per linear foot.

Concrete shall be forced under and around flat plate, anchors and angles. Proper consolidation shall be achieved by localized internal vibration. Finishing of the concrete shall be achieved by hand finishing within one foot of the expansion device. The vertical and horizontal concrete vent holes shall be offset from each other. Do not alternate holes at the 12" spacing.

Longitudinal reinforcing steel shall be placed so that ends shall not be more than  $\pm 1"$  from vertical plate and the vertical leg of the angle at the expansion device.

Complete joint penetration welds utilized in the fabrication of the expansion device shall be nondestructively tested by an approved method.

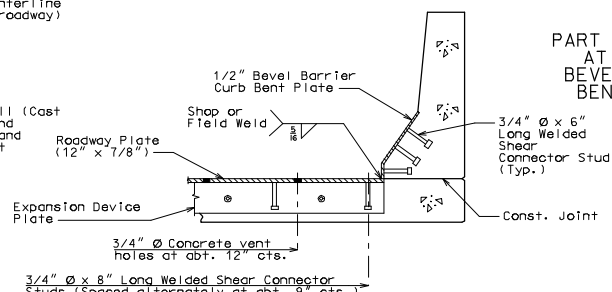


Note: Concrete vent holes not shown for clarity.

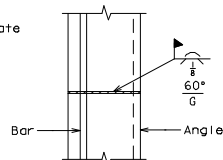
PART SECTION THRU  
BEVEL PLATE

Diagram illustrating a butt joint configuration. The joint consists of a  $\frac{3}{4}$ " Bar, a Bevel Plate, a Roadw Plate, and a  $\frac{5}{8}$ " Plate. The joint is welded with an 8" Angle. Dimensions shown include  $\frac{1}{4}$ " and  $\frac{1}{2}$ ".

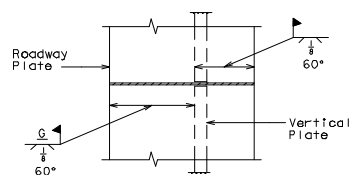
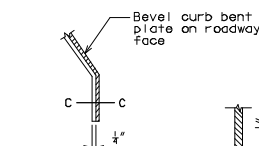
PART SECTION THRU  
BEVEL PLATE



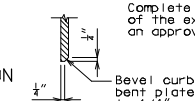
PART SECTION A-A



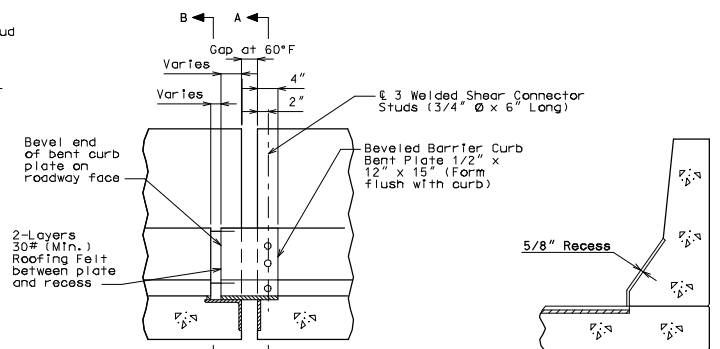
PART PLAN OF  
ANGLE AND BAR

PART PLAN ROADWAY PLATE  
AND VERTICAL PLATE

PART ELEVATION  
AT END OF  
BEVELED CURB  
BENT PLATE



SECTION C-C



ELEVATION OF BARRIER CURB

PART SECTION B-B

### DETAILS OF FLAT PLATE EXPANSION DEVICE AT END BENT NO.

Sheet No.      of